# PEDIATRICS.

UNDER THE CHARGE OF

LOUIS STARR, M.D., AND THOMPSON S. WESTCOTT, M.D.,
OF PHILADELPHIA.

**Pyopericarditis in Children under Twelve Years of Age.**—F. J. Poynton (*Brit. Med. Jour.*, 1908, ii, 365) has studied 100 cases of pyopericarditis. Of these, 66 cases were less than three years old, 17 between three and four; males and females were affected alike. All of them had pulmonary disease as well, 60 having empyema, 40 pneumonia or acute pleurisy; a few also had acute pulmonary tuberculosis. Predisposing causes were measles, whooping-cough, and influenza; the exciting cause always the pneumococcus. From a pathological standpoint some had only a few flakes of fibrinopurulent exudate and a small amount of slightly turbid fluid; others had a fibrinoplastic exudate, similar to but softer than that in rheumatism; others had a large amount of creamy pus, and in the greater number a remarkable thickening of the pericardium was found with some inspissated pus and partial organization of the exudate. The pericarditis arises usually independently of the pleurisy by a simultaneous infection or secondary blood infection, and but rarely by direct continuity. In only 6 cases was the diagnosis confidently made. The difficulty of the diagnosis is due to the following: the pericardial friction exists but rarely; the patients are usually very young; pulmonary disease, such as pneumonia, pleurisy, or empyema, which may even be bilateral, always co-exists; there is no endocarditis; suppurative conditions in other parts of the body—meningitis, peritonitis—may also be present. An acute course was observed in 20 of the patients, in 50 a subacute, while the remainder ran a chronic course. In the first class the duration was about six weeks, in the last six months or longer. In the first class the disease usually began abruptly, in the second with cough, pleural pain, and wasting, in the third with gradual failure of health, strength, and wasting. The most important signs are progressive muffling of the heart sounds, enlargement of the cardiac area, dulness over the pericardium, pear-shaped outline of a distended pericardium, abrupt transition from dulness of fluid to resonance of lung tissue, and a wavy and diffuse pulsation to left of the sternum. The differential diagnosis from rheumatic pericarditis and the treatment are discussed. The latter must be surgical, and even then the disease is almost invariably fatal.

**The Reappearance of a Cutaneous Reaction, which had already Disappeared, during a Scarlet-fever Infection.**—P. Heim and M. K. John (*Wien. med. Woch.*, 1908, lviii, 1831) report the case of a girl, aged four years, in whom von Pirquet's cutaneous reaction appeared in a most decided manner; the reaction disappeared at the usual time and was followed by four tuberculin injections for the purpose of treatment. Three days after the last injection, one month after the cutaneous reaction, the child broke out with the rash of scarlet fever and simultaneously with this the tuberculin papules reappeared; just at the time of the test there were three papules, and they appeared at exactly the same points. A little later at the points of the cutaneous injections, the dosage of which was extremely small, a local reaction also appeared at three places; this consisted of intense redness and infiltration, particularly at the last point of injection. The authors explain this in the following manner: The tuberculysins in the tuberculous child are attached originally to cells; at the onset of the scarlet fever they entered the circulatory stream at the same time as the scarlet fever antibodies; they dissolved the remains of the bacilli deposited in the skin and thus produced the second reaction.

---

**Pathogenesis of Whooping-cough.**—The publications of Bordet and Gengou concerning the etiology of whooping-cough led C. FRAENKEL to make a series of observations (*Münch. med. Woch.*, 1908, lv, 1683). The sputum of 38 patients was examined, but from only 8 of these could the characteristic organism be cultivated. All the positive cases were in the very beginning of the affection. The organism grew best on media containing considerable human blood. The bacillus is small in size, non-motile, does not stain after Gram stains in toto and quite evenly, and has a definite form even after a number of recultivations. It was obtained from all the early cases of whooping-cough. When pure cultures were injected into monkeys, and particularly when they were made to breathe air containing them, they developed a typical whooping-cough which lasted from eight to ten days; there was no expectoration. Inasmuch as the "Complementablenkung" was negative in four out of five tests, the agglutination test uncertain, and the organisms found in two children absolutely free from whooping-cough, Fraenkel feels that the position of this organism as the cause of whooping-cough is not firmly established; personally, however, he feels that the bacillus stands in some relation to the disease.

---

**Treatment of Scarlet Fever.**—K. OPPENHEIMER (*Münch. med. Woch.*, 1908, iv, 1691) discusses the treatment of scarlet fever with particular reference to baths and diet. He disagrees with the majority of the German authors, agreeing rather with French and American observers in regard to baths and cold sponging; he does not employ them unless the nervous system is affected. He considers their influence dangerous for the heart, and, more particularly through the possibility of taking cold, for the kidneys. Cold water, especially if applied in the form of packs, is almost certain to chill the kidneys and lead to nephritis. In the first stage of the illness his treatment is purely expectant; rest with plenty of water is probably all the child requires during this time; if the child does not wish to eat or drink he does not force food, but considers the rest more important. As soon as the child evinces some appetite milk is given, also diluted tea; later in the disease any food usually given a child is allowed, with the exception of meat, eggs, and their products. He emphasizes that none of the foods must be salted too much. He keeps his patients in bed for from five to six weeks; in the sixth week he permits warm bathing, using a 1 per cent. corrosive sublimate solution for the body. He has never seen a single kidney complication during the last eighteen years, although he has treated in that time more than 150 cases.

**Epidemic Infantile Paralysis.**—M. ALLEN STARR (*Jour. Amer. Med. Assoc.*, 1908, ii, 111) discusses the epidemic of acute anterior poliomyelitis occurring in New York and vicinity during the year 1907, in which over 2000 cases were observed. The epidemic began in May and lasted until December, being at its height during August and September. The mortality was 6 to 7 per cent. The summer was hot, but not unusually so; it was unusually dry, however. The onset of the disease was uniformly accompanied by brisk fever, vomiting, malaise, sweating, severe pains in limbs and back, rigidity of spine, and in a few cases retraction of head; diarrhœa lasted for a few days, and deirium began often about the second day. The paralysis was usually discovered about the third or fourth day. In the vast majority of cases the legs were chiefly affected, in some the arms as well, in some even the muscles of the back, abdomen, neck, face, and eye. True infantile hemiplegia, poliomyelitis with bulbar paralysis, poliomyelitis with polio-encephalitis of Wernicke, and the ordinarily recognized type of poliomyelitis were observed. Retention of urine and incontinence lasting for some days were observed, but in no case did either become permanent. Death was due to respiratory paralysis or heart failure, and not to the febrile affection. The paralysis was always flaccid, with rapidly following atrophy in the muscles and a rapid loss of faradic contractility. Pain in the affected parts was very common and frequently persisted. Many cases recovered absolutely; most of them improved very much. Bacteriological examination of the spinal fluid and of the blood, as well as serodiagnostic experiments were without result. The treatment consisted in dry-cupping or ice-bags in the early stage of the disease to relieve congestion; the fever could be kept down with sponging, or with coal-tar remedies, in suitable doses, with or without Dover's powder. To keep the patient quiet a purge should be given and the diet consist of milk. Urotropin is advised until the fever subsides because of its antiseptic properties. After the acute stage is over, strychnine, massage, and galvanism should be resorted to. Deformities should be prevented from the beginning of the condition.

---

**Skiagraphy of the Newborn.**—VAILLANT and BOUCHACOURT (*Ann. d. hygiène publique et de médecine légale*, 1908, ix, 65) have made a number of skiagraphic studies to determine whether it is possible to tell whether a dead child was dead at birth, whether it died shortly after, or some time after birth—with the following conclusions: (1) In children who have not lived at all no organs are visible on the skiagraph. (2) In children who made a few respirations the stomach alone is visible; the greater the number of respirations the clearer and larger is the picture of this organ; from the size of a small pea it becomes the size of a large bean. (3) In children who lived from one to fourteen hours the stomach picture is still clearer and larger; the intestine also became visible in the skiagraph. (4) In children who have lived several days without nourishment, more of the abdominal viscera become visible, and the lungs, which have not been permeable to the $x$-rays until this moment, become visible in the picture; the liver becomes sharply outlined, as well as the shadow of the heart, although the latter is not always so clear. (5) In children who have been fed for several days all the organs are more visible, and the gases contained in the intestines produce a better picture of the intestinal loops.